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Halverson et al.

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(54) **SPINAL IMPLANT**

FOREIGN PATENT DOCUMENTS

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(58) **Field of Classification Search** 623/17.15,
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See application file for complete search history.

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(57) **ABSTRACT**

Provided is an intervertebral disc prostheses for installation in a spinal column between superior and inferior vertebral bodies. A first intervertebral plate engages one or both of the inferior vertebral endplate and the inferior ring apophysis of the superior vertebral body. A second intervertebral plate engages one or both of the superior vertebral endplate and the superior ring apophysis of the inferior vertebral body. A biaxial rolling-contact core is located between the intervertebral plates. The core includes a convex upper surface and a convex lower surface. The upper surface is curved around a first axis and the lower surface is curved around a second axis that is rotated relative to the first axis. The core is capable of rolling translation relative to the first intervertebral plate along the upper surface and in a first direction, and rolling translation relative to the second intervertebral plate along the lower surface and in a second direction. A flexure constrains the biaxial rolling-contact core to a rolling translation without sliding in at least one of said first direction and said second direction.

23 Claims, 3 Drawing Sheets

